

## CLAIMS

What is claimed is:

- 1           1.       A method of providing information to a user through a control device, the  
2 method comprising:  
3           receiving an event signal indicating an occurrence of an event; and  
4           responsive to receiving the event signal, generating a notification signal within the  
5           control device to notify the user that the event has occurred.
- 1           2.       The method of claim 1, wherein generating the notification signal comprises:  
2           providing the user with a visual indication on the control device that the event has  
3           occurred.
- 1           3.       The method of claim 2 wherein the visual indication comprises illuminating a  
2 light source on the control device.
- 1           4.       The method of claim 3 wherein the light source blinks to indicate that the  
2 event is urgent.
- 1           5.       The method of claim 1, wherein generating the notification signal comprises:  
2           providing the user with an audio indication on the control device that the event has  
3           occurred.
- 1           6.       The method of claim 1, wherein generating the notification signal comprises:  
2           providing the user with a vibratory indication on the control device that the event has  
3           occurred.
- 1           7.       The method of claim 1, wherein generating the notification signal comprises:

2 providing the user with a tactile indication on the control device that the event has  
3 occurred.

1 8. A method for notifying a computer user of occurrence of an event, the method  
2 comprising:

3 communicating from a host computer to a control device that the event has occurred,  
4 the control device having a region on its surface for an alterable texture; and  
5 responsive to the communication from the host computer, altering the texture on the  
6 region on the surface of the control device to notify the user that the event has  
7 occurred.

1 9. The method of claim 8, wherein altering the texture comprises:  
2 raising a plurality of pegs through a plurality of apertures in a surface of the control  
3 device.

1 10. The method of claim 9, wherein raising the plurality of pegs comprises:  
2 rotating an actuator to push a lever which is communicatively coupled to the plurality  
3 of pegs.

1 11. The method of claim 10, wherein the actuator is of electromagnetic type.

1 12. The method of claim 11, wherein the electromagnetic actuator is bi-stable.

1 13. The method of claim 10, wherein the actuator is a solenoid.

1 14. The method of claim 9, wherein the plurality of pegs is in a grid shape.

1 15. The method of claim 9, wherein the plurality of pegs is in a quincunx shape.

1           16.     The method of claim 8, wherein the control device is a mouse.

1           17.     A method for notifying a computer user of occurrence of an event, the method  
2 comprising:

3           communicating from a host computer to a mouse that the event has occurred, the  
4           mouse having a region on its surface for an alterable texture; and

5           responsive to the communication from the host computer, altering the texture on the  
6           region on the surface of the mouse to notify the user that the event has  
7           occurred, wherein altering the texture comprises raising a plurality of pegs  
8           through a plurality of apertures in the region on the mouse.

1           18.     A system for notifying a computer user of an occurrence of an event by  
2 changing the texture of a region on the control device being used by the user, the system  
3 comprising:

4           a plurality of pegs in the region on the control device for changing the texture of the  
5           control device; and  
6           an actuator module for controlling the plurality of pegs.

1           19.     A system for notifying a computer user of an occurrence of an event by  
2 changing the texture of a region on the control device being used by the user, the system  
3 comprising:

4           a key plate on the region of the control device; and  
5           a pegs plate comprising a plurality of pegs, a portion of which can protrude through  
6           the key plate to change the texture of the region on the control device

1           20.     A system for notifying a computer user of an occurrence of an event by  
2 changing the texture of a region on the control device being used by the user, the system  
3 comprising:

4           a key plate on the region on the control device;

5 a pegs plate comprising a plurality of pegs, a portion of which can protrude through  
6 the key plate to change the texture of the region on the control device;  
7 a lever communicatively coupled to the pegs plate to reposition the pegs plate with  
8 respect to the key plate;  
9 a cam communicatively coupled to the lever for manipulating the lever; and  
10 an actuator module communicatively coupled to the cam for rotating the cam.

1 21. The system of claim 20 wherein the actuator module is bi-stable.

1 22. The system of claim 20 wherein the actuator module comprises a solenoid.

1 23. The system of claim 20 wherein the lever is flexible.

1 24. The system of claim 20 wherein the pegs plate comprises a plurality of pegs in  
2 a grid shape.

1 25. The system of claim 20 wherein the pegs plate comprises a plurality of pegs in  
2 a quincunx configuration.

1 26. A system for notifying a computer user of an occurrence of an event by  
2 changing the texture of a region on the control device being used by the user, the system  
3 comprising:

4 protruding means in the region on the control device for changing the texture of the  
5 control device; and  
6 actuator means for controlling the protruding means.

1 27. A system for notifying a computer user of an occurrence of an event by  
2 changing the texture of a region on the control device being used by the user, the system  
3 comprising:

4 alterable means on the region of the control device for altering the texture of the  
5 region on the control device; and  
6 protruding means for protruding through the alterable means on the region of the  
7 control device.

1 28. A computer program product for storing a program for permitting a computer  
2 to perform a method of providing information to a user through a control device, the method  
3 comprising:

4 receiving an event signal indicating an occurrence of an event; and  
5 responsive to receiving the event signal, generating a notification signal within the  
6 control device to notify the user that the event has occurred.

1 29. A computer program product for storing a program for permitting a computer  
2 to perform a method for notifying a computer user of occurrence of an event, the method  
3 comprising:

4 communicating from a host computer to a control device that the event has occurred,  
5 the control device having a region on its surface for an alterable texture; and  
6 responsive to the communication from the host computer, altering the texture on the  
7 region on the surface of the control device to notify the user that the event has  
8 occurred.